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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,021	11/13/2003	Atsushi Kato	075834.00447	1983

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EXAMINER

BERNATZ, KEVIN M

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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12/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/714,021

Applicant(s)

KATO ET AL.

Examiner

Kevin M. Bernatz

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application
- ☐ Other: ____.

DETAILED ACTION

Response to Amendment

1. Amendments to claims 1, 3 and 4, and addition of new claims 9 - 14, filed on October 29, 2007, have been entered in the above-identified application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Request for Continued Examination

3. A Request for Continued Examination (RCE) under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 29, 2007 has been entered. An action on the RCE follows.

Claim Rejections - 35 USC § 103

4. Claims 1 – 4 and 8 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto et al. (U.S. Patent No. 6,045,901) in view of Oguchi et al. (U.S. Patent No. 5,470,645) for the reasons of record as set forth in Paragraph No. 3 of the Office Action mailed on May 29, 2007.

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Regarding the amended language of claim 1, Hashimoto et al. disclose adding alkali metal sulfonate to at least one of the first and second magnetic layers for optimization of the durability and smoothness (*col. 3, lines 46 – 56 and col. 10, line 4*). While Hashimoto et al. disclose the amount added in terms of eq/g, the Examiner notes that Oguchi et al. disclose adding substantially identical compounds to the binder in amounts meeting Applicants' claimed mmol/g limitation (*col. 4, line 54 bridging col. 5, line 10*).

Since both Hashimoto et al. and Oguchi et al. teach that the amount of added polar group (*i.e. alkali metal sulfonate*) can be varied to effect the durability and smoothness in a magnetic recording medium, the Examiner deems that it would have been obvious to one having ordinary skill in the art to determine an amount of said additive(s) meeting Applicants' claimed mmol/g limitation by optimizing the results effective variable through routine experimentation. *In re Boesch*, 205 USPQ 215 (CCPA 1980); *In re Geisler*, 116 F. 3d 1465, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997); *In re Aller*, 220 F.2d, 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding the amended language of claims 3 and 4, the Examiner notes that both Hashimoto et al. (*col. 3, lines 46 – 56*) and Oguchi et al. (*col. 5, lines 2 - 5*) disclose that it is known in the art that one can add both alkali metal sulfonate and tertiary amines to provide polar groups to the binder resin.

Regarding claims 9 – 14, these mmol/g ranges are deemed obvious due to the noted optimization above.

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5. Claims 1 – 4 and 8 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al. (U.S. Patent No. 6,010,773) in view of Oguchi et al. ('645) for the reasons of record as set forth in Paragraph No. 4 of the Office Action mailed on May 29, 2007.

Regarding the amended language of claim 1, Murayama et al. disclose adding alkali metal sulfonate to at least one of the first and second magnetic layers for optimization of the durability and smoothness (*col. 6, lines 26 – 36; col. 8, lines 1 – 11; and Examples*). While Murayama et al. disclose the amount added in terms of eq/g, the Examiner notes that Oguchi et al. disclose adding substantially identical compounds to the binder in amounts meeting Applicants' claimed mmol/g limitation (*col. 4, line 54 bridging col. 5, line 10*).

Since both Murayama et al. and Oguchi et al. teach that the amount of added polar group (*i.e. alkali metal sulfonate*) can be varied to effect the durability and smoothness in a magnetic recording medium, the Examiner deems that it would have been obvious to one having ordinary skill in the art to determine an amount of said additive(s) meeting Applicants' claimed mmol/g limitation by optimizing the results effective variable through routine experimentation. *In re Boesch*, 205 USPQ 215 (CCPA 1980); *In re Geisler*, 116 F. 3d 1465, 43 USPQ2d 1362, 1365 (Fed. Cir. 1997); *In re Aller*, 220 F.2d, 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding the amended language of claims 3 and 4, the Examiner notes that both Murayama et al. (*col. 6, lines 26 – 36 and col. 8, lines 1 – 11*) and Oguchi et al.

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(col. 5, lines 2 - 5) disclose that it is known in the art that one can add both alkali metal sulfonate and tertiary amines to provide polar groups to the binder resin.

Regarding claims 9 – 14, these mmol/g ranges are deemed obvious due to the noted optimization above.

Response to Arguments

6. The rejection of claims 1 – 4 and 8 - 14 under 35 U.S.C § 103(a) – Hashimoto et al. and/or Murayama et al. in view of Oguchi et al.

Applicant(s) argue(s) that "the prior art references of record do not teach or suggest the specified magnetic material of the present invention having the specified alkali metal sulfonate for the previously specified structure whether alone and/or in combination with the specified polar group for the tertiary amine at the designated quantity". The Examiner respectfully disagrees – see rejection of record for column and line citations disclosing the claimed limitations.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Kevin M. Bernatz whose telephone number is (571) 272-1505. The Examiner can normally be reached on M-F, 8:30 AM - 5:00 PM.

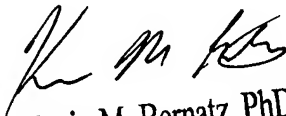
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KMB

December 17, 2007



Kevin M. Bernatz, PhD
Primary Examiner